RADUGIN, K.V.; BELOUSOV, A.F.

Association of Torgashino limestones with old formations in the Krasnoyarsk Ridge. Trudy Gor.-geol.inst.sap.-Sib.fil.AN SSSR no.17:39-48 '56. (MIRA 13:5)
(Krasnoyarsk region--Limestone)

BELOUSOV, A.F.

Geology of the Biysk salient in the northern Altai Mountains. Trudy Gor.-geol.inst.sap.-Sib.fil.AN SSSR no.17:179-190 '56. (MIRA 13:5)

(Altai Mountains--Geology)

BELOUSOV, A.F.

Cross section of ancient nonmetamorphic formations and of the upper border of the pre-Cambrian in the Altai. Izv. TPI 90:12-22 '58.
(MIRA 12:2)

1. Predstavleno professorom doktorom K.V. Raduginym.
(Altai Mountains--Geology, Stratigraphic)

BELOUSOV, A.F.

Ancient formations and effusive-sedimentary iron and manganese mineralization in the Cambrian of the eastern Altai Mountains. Trudy Inst.geol.i geofiz.Sib.otd.AN SSSR no.4:61-76 '60. (MIRA 15:7)

(Altai Mountains--Iron ores) (Altai Mountains--Manganese ores)

BELOUSOV, A.F.

Ancient effusive manifestations in the Gornyy Altai. Geol. i geofiz. no.8:53-65 '61. (MIRA 14:9)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR, Novosibirsk.
(Altai Mountains--Rocks, Igneous)

BELOUSOV, A.F.

Phosphorite-forming organism from the Pre-Cambrian of the Gornyy Altai. Geol.i geofiz. no.10:124-125 '61. (MIRA 14:12)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR, Novosibirsk.
(Altai Mountains--Paleontology, Stratigraphic)

BELOUSOV, A.F., i SENNIKOV, V.M.

Cambrian of the northeastern Altai. Trudy SNIIGGIMS no.13:123-135 '60. (MIRA 16:2)
(Altai Mountains—Geology, Stratigraphic)

BELOUSOV, A.F.

Interpretation of the geology of an area by the land sculpture.
Izv.vys.ucheb.zav.; geol. i razv. 5 no.8:51-64 Ag '62. (MIRA 15:11)

1. Tomskiy politekhnicheskiy institut im. S.M.Kirova.
(Geology)

BELOUSOV, A.F.; KOCHKIN, Yu.N.

Geochemical characteristics of lava in the Riphean-Cambrian volcanic complexes of the Altai. Trudy Inst. geol. i geofiz. Sib. otd. AN SSSR no.33:151-164 '63.

(MIRA 17:11)

BELOUSOV, A.F.; DOBRETSOV, N.A.; KOCHKIN, Yu.N.; KRIVENKO, A.P.; KUTOLIN, V.A.; TELESHEV, A.Ye.; KHLESTOV, V.V.

Experience in the utilization of calculations on electronic computers for the solution of petrochemical and mineralogical problems. Geol. i geofiz. no.6:163-164 '64. (MIRA 18:11)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR, Novosibirsk.

BELOUSOV, A.F.

Peculiar case of the gravity division of matter in basaltic lavas. Geol. i geofiz. no.2:153-155 '65. (MIRA 18:9)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR, Novosibirsk.

BELOUSOV, A.F.; VELINSKII, V.V.; KOCHKIN, Yu.N.

Plagioclases in the basalt effusives of the Upper Proterozoic and Cambrian in the Altai and Salair Range. Geol. i geofiz. no.3:183-189 '65. (MIRA 18:6)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR, Novosibirsk.

BELOUSOV, A.F.; DUDAREV, A.N.

Practice in analyzing the rock density of ancient effusive-sedimentary complexes in the Gornyy Altai. Geol. i geofiz. no.10:34-44 '65. (MIRA 18:12)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR, Novosibirsk. Submitted January 10, 1964.

BELOUSOV, A.

We will finish the new blast furnace in Magnitka on time.
Na stroi.Ros. 4 no.6:1-3 Je '63. (MIRA 16:6)

1. Nachal'nik tekhnicheskogo otdela tresta Magnitostroy.
(Magnitka--Blast furnaces--Design and construction)

BELOUSOV, A.G., inzhener; PRIKHNO, L.A., inzhener.

Control scheme of an air circuit breaker. Elek.sta. 24 no.5:29-31 My '53.
(MLRA 6:7)
(Electric circuit breakers)

BELOUSOV, A.G., podpolkovnik meditsinskoy sluzhby.

Peculiarities in the clinical course of peritonitis when using antibiotics. Voen.-med. zhur. no.10:25-29 O '55. (MLRA 9:10)
(ANTIBIOTICS) (PERITONITIS)

BELOUSOV, A.G., inzh.

Experience in the operation of the cooling systems of large hydrogenerators. Elek. sta. 35 no.12:71-72 D '64. (MIRA 18:2)

SITENKO, V.M., prof.; SAMOKHVALOV, V.I., kand. med. nauk; BELOUSOV, A.G.

Multiple recurrences of peptic ulcers (Zollinger-Ellison syndrome).
Vest. khir. no.10:14-20 '64. (MIRA 19:1)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (nachal'nik - prof. V.M. Sitenko) Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova i voyennogo gospitalya.

A. I. BELOUSOV

"Development of Equipment and Operating Conditions for Coating the Effective Surface of Cathodes with a Layer of Uniform Density" from Annotations of Works Completed in 1955 at the State Union Sci. Res. Inst. Min. of Radio Engineering Ind.

So: B-3,080,964

BELOUSOV, A.I.

Construction of a caisson under complex hyirogeological conditions. Prom. stroi. 42 no.3:20-21 '65. (MIRA 18:7)

1. Trest "Magnitostroy".

BELOUSOV, A. I.

BELOUSOV, A. I.--"Heat Evolution and Deformation of Metals in Cutting." [illegible] Higher Education USSR. Moscow Order of Lenin and [illegible] Imeni S. Ordzhonikidze. Moscow, 1955. (Dissertation for the Degree of Candidate in Technical Science).

SO Knizhnaya letopis'
No 2, 1956

S/123/59/000/008/021/043
A004/A002

Translation from: Referativnyy zhurnal, Mashinostroyeniye, 1959, No. 8, pp. 74-75, # 29122

AUTHORS: Krivoukhov, V. A., Belousov, A. I.

TITLE: Determining the Cutting Forces on the Basis of the Physical Characteristics of the Metals to be Machined

PERIODICAL: V sb.: Issled. po fiz. tverdogo tela. Moscow, AN SSSR, 1957, pp. 132-138

TEXT: Formulae are presented to determine the cutting forces, suggested by V. D. Kuznetsov, V. A. Krivoukhov and A. M. Rozenberg, which treat the cutting process like a process of plastic compression. It is pointed out, that the coefficients of chip shrinkage and friction, contained in the formulae, render their practical use difficult. The total cutting power is composed of the power of primary metal deformation in the cutting zone, the power of secondary deformation, developed by the friction force at the front edge of the cutting tool, power of secondary deformation, developed by the normal force at

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S/123/59/000/008/021/043
A004/A002

Determining the Cutting Forces on the Basis of the Physical Characteristics of the Metals to be Machined

the front edge of the tool, and the friction power at the back edge. As a result of calculations and of an analysis of the temperature field, the authors suggest a new formula for the determination of the cutting force P_z, based on the physical properties of the metals to be machined (specific gravity, specific heat, melting point, temperature conductivity, coefficient of friction between metal and tool), cutting elements (depth, feed), blank diameter, and tool angles in the plane. Experimental and calculated graphs of the cutting force $P_z = f(V,S)$ are presented. The divergence between experimental and calculation data does not exceed 6%. There are 5 figures and 6 references.

B. I. L.

Translator's note: This is the full translation of the original Russian abstract.

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SOV/170-59-5-3/18

24(8)

AUTHORS: Krivoukhov, V.A., Belousov, A.I., Buyanova, T.L.

TITLE: Cooling Properties of Liquids (Okhlazhdayushchiye svoystva zhidkostey)

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1959, Nr 5, pp 15-19 (USSR)

ABSTRACT: The cooling properties of liquids are estimated by the average rate of cooling of a specimen immersed in the liquid. The cooling rate depends also on the shape, dimensions and temperature conductivity of the specimen and on the conditions of the flow of the liquid around the specimen. The present investigation was undertaken to find a standard method of testing the cooling liquids and to study their cooling properties. The computation of the cooling of a solid body placed into a gaseous or liquid medium was carried out on the basis of G.M. Kondrat'yev's theory of regular processes. The experimental cooling rate is determined by the tangent of the angle of slope of the function $\ln\theta = f(\tau)$:

$$m = \frac{\ln \theta_{init.} - \ln \theta_{final}}{\Delta \tau}$$

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The authors studied the effect of the nature and temperature of liquids, and of the flow velocity, on the rate of cooling. 32 different liquids were tested and the results are presented in Table 1. To increase the rate of cooling, a liquid must be chosen with maximum heat conductivity and minimum kinematic viscosity. The rate of cooling increases sharply with a decrease in the temperature of the cooling liquid. The effect of the flow velocity on the rate of cooling can be expressed by the following experimental formula:

$$m = 0.12 + 0.00024\ w,$$

where w is the velocity of the freely falling stream of liquid defined as follows:

$$w = w_0\sqrt{2gH}$$

where w_0 is the velocity of liquid flow from a tank, and H is the height of the falling of the stream.
There are 3 graphs, 1 diagram and 1 table

BELOUSOV, A. I.

PHASE I BOOK EXPLOITATION SOV/5116

Akademiya nauk SSSR. Institut mashinovedeniya

Instrumental'nyye rezhushchiye materialy (Cutting-Tool Materials)
Moscow, Izd-vo AN SSSR, 1960. 137 p. 6,000 copies printed.

Resp. Ed.: A. I. Isayev, Doctor of Technical Sciences, Professor;
Ed. of Publishing House: G. B. Gorshkov; Tech. Ed.: N. F. Yegorova.

PURPOSE: This collection of articles is intended for scientific personnel and production engineers engaged in the manufacture and use of cutting tools.

COVERAGE: The collection contains papers read at a seminar on cutting-tool materials organized and sponsored by the Komissiya po tekhnologii mashinostroyeniya (Commission on Processing in Machine Building). The seminar investigated the cutting properties of ceramic and carbide tool materials, the effect of temperature on cutting edges, the problem of wear, and the possibility of using cutting tools more efficiently. No personalities are mentioned. References accompany each article. There are 81 references: 79 Soviet, and 2 English.

Card 1/3

80285

S/170/60/003/04/14/027
B007/B102

18.9500

AUTHOR: Belousov, A. I.

TITLE: The Part Played by the Thermophysical Properties of Materials During a Deformation Process

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1960, Vol. 3, No. 4, pp. 90 - 94

TEXT: The author and V. A. Krivoukhov (Ref. 4) established an equation for calculating the cutting force. In this equation the strength properties of the material to be worked were substituted by its limit heat content. M. M. Khrushchev and M. A. Babichev (Ref. 5) investigated the wear of various materials and found that the relative resistance to wear of the materials is directly proportional to their strength or breaking strength. The author checked these data by experiments and found that this holds only for purely plastic materials for which the coefficient of relative resistance to wear can be determined from formula (1). In this paper the influence of the thermophysical properties of materials on the process of cutting is investigated. The author's experimental data given in the diagram (Fig. 1) and in Table 2 show the following: An increase in heat conductivity of the tool

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The Part Played by the Thermophysical Properties of Materials During a Deformation Process

material leads to a decrease in cutting temperature, to a change of the friction coefficient and cutting force and to a deformation of the material to be worked. The curves given in Fig. 2 show that the wear of the cutting tool decreases with increasing heat conductivity of the tool material. The quality of the hard alloys is debased by the binding agent. Highly heat conductive cutting tools are shown to be necessary for efficient continuous cutting of heat resistant alloys. However, this does not apply without reservations to other metals. The thermophysical properties of alloys influence also their heat resistance. Stability to temperature changes is the most important property of heat resistant materials. According to Lindman and Bobrovskiy (Ref. 2), this stability can be expressed by formula (3): $\frac{\lambda \sigma_b}{\alpha E}$, with λ denoting the heat conductivity coefficient, σ_b the tensile strength, α the coefficient of linear thermal expansion and E the modulus of elasticity. With the help of data from the paper of Ref. 9, the curves $\alpha = f(\lambda)$ (Fig. 3) were plotted for various steel groups showing that the $\alpha = f(\lambda)$ curve rotates clockwise with increasing heat resistance of the alloy. Both the coefficient of heat expansion and heat conductivity increase when the heat resistant alloy is heated.

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The Part Played by the Thermophysical Properties of Materials During a Deformation Process

80285
S/170/60/003/04/14/027
B007/B102

For intermittent cutting of heat resistant alloys such hard tool steels must therefore be produced, in which the components obey the same or almost the same law of thermal expansion. This law is determined by the ratio λ/α. There are 3 figures, 2 tables, and 9 Soviet references.

ASSOCIATION: Ordena Lenina aviatsionnyy institut im. S. Ordzhonikidze, g. Moskva ("Order of Lenin" Aviation Institute imeni S. Ordzhonikidze, City of Moscow)

Card 3/3

BELOUSOV, A.I

3

PHASE I BOOK EXPLOITATION SOV/5786

Krivoukhov, V. A., S. V. Yegorov, E. Ye. Brushteyn, A. I. Markov, A. G. Chervyakov, P. D. Bespakhotnyy, A. I. Belousov, and A. D. Chubarov

Obrabatyvayemost' rezaniyem zharoprochnykh i titanovykh splavov (Machinability of Heat-Resistant and Titanium Alloys) Moscow, Mashgiz, 1961. 245 p. Errata slip inserted. 4500 copies printed.

Ed. (Title page): V. A. Krivoukhov; Reviewer: A. M. Karatygin, Candidate of Technical Sciences; Ed. of Publishing House: N. A. Ivanova; Tech. Ed.: A. F. Uvarova; Managing Ed. for Literature on Cold Working of Metals and Machine-Tool Making: V. V. Rzhavinskiy, Engineer.

PURPOSE: This book is intended for technical personnel concerned with the machining of metals. It may also be useful to students at schools of higher education.

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Machinability of Heat-Resistant (Cont.) SOV/5788

COVERAGE: Basic conditions for improving the machinability of heat-resistant and titanium alloys are examined. Results of investigations on the effect of various factors (e.g., tool geometry, single-point tool wear, cutting regimes, lubricating coolants, heat treatment) on the machinability of alloys are presented. Recommendations are given for the selection of rational cutting regimes, effective lubricating coolants, and preliminary heat treatment. No personalities are mentioned. There are 91 references: 61 Soviet, and 30 English.

TABLE OF CONTENTS [Abridged]:

Card 2/6

BELOUSOV, A.L., kapitan 2-go ranga

"Altitude and azimuth of celestial bodies (VAS-58)," vol. 1,2,3,4, 1951-1960. Mor. sbor. 44 no.5:90-92 My '61. (MIRA 16:5)
(Nautical astronomy)

33545 S/123/62/000/002/008/012
A004/A101

15.2410

AUTHOR: Belousov, A. I.

TITLE: Prospects of increasing the cutting properties of tool materials

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 2, 1962, 70, abstract 2B385 (V sb. "Instrumental'n. rezhushchiye materialy", Moscow, AN SSSR, 1960, 20-31)

TEXT: The author analyzes the general regularities of metal deformation, connecting the mechanical properties of the metals with their heat content. The wear of the cutting tool being expressed in the surface deformation of the metal depends on the magnitude of heat content of the metal being deformed. Based on the physical heat conditions of tool materials (ЦМ 332 [TsM332], Р 18 [R18], Т 15К6 Т15К6, Т5К10, ВК 8 [VK8], ВК6 [VK6], ВК 3 [VK3]) it is assumed that their limit heat content decreases with the increase in heat conductivity. It was established by tests that titanium-cobalt sintered carbides, characterized by a low heat conductivity, show the greatest resistance to wear during the turning of steel. In the continuous cutting of heat-resistant alloys at cutting speeds of 25 - 40 m/min, the heat-conducting sintered carbides of the tungsten-cobalt

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BELOUSOV, A.I., inzh.

Investigating the motor of the new submerged electric pump.
Izv.vys.ucheb.zav.; mashinostr. no.8:113-117 '62. (MIRA 15:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektrifikatsii sel'skogo khozyaystva.
(Electric motors, Induction)
(Mine pumps)

BELOUSOV, A.I., kapitan 2-go ranga

Curves of changes in the speed of a boat with the change of propulsion conditions. Mor. sbor. 46 no.5:51-53 My '63. (MIRA 17:1)

ACCESSION NR: AP4043426 S/0147/64/000/003/0106/0109

AUTHOR: Belousov, A. I.

TITLE: Determining the axial rate of flow of a liquid with the shaft rotating

SOURCE: IVUZ. Aviatsionnaya tekhnika, no. 3, 1964, 106-109

TOPIC TAGS: bearing, hydrostatic bearing, grease flow, turbulent flow, axial flow

ABSTRACT: The author determines the flow rate of grease along the axis of a hydrostatic bearing (a bearing with forced grease injection into special chambers) working in a turbulent flow of the liquid, taking into consideration the rotation of the shaft. The purpose of the study was to express the liquid flow rate in elementary functions. In his derivation of the computational expressions, the author operates on the basis of the following major assumptions: 1) there is a steady-state flow in the bearing groove; 2) the flow velocity V in the cavity perpendicular to its movement is constant and equal to the mean-flow velocity; 3) the groove is completely filled with the liquid (that is, the stream compression factor $\varepsilon_{str} = 1$); 4) the resistance factor λ does not depend on the speed with which the shaft rotates; 5) the loss factors on entering (ζin) and on leaving the groove (ζ out) likewise do not depend on the speed of rotation;

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ACCESSION NR: AP4043426

6) the rotation has no effect on the degree of turbulation of the flow. The author finally obtains the following expression for the volumetric rate of flow (Q):

$$Q = \mu_0 \cdot F \cdot \sqrt{2\frac{p_{in} - p_{out}}{\rho} - K\frac{l}{\delta}U^2},$$

where the flow-rate factor

$$\mu_0 = \frac{1}{\sqrt{(\zeta_{in} + \zeta_{out}) + \lambda_0 \frac{l}{2\delta}}}.$$

The following nomenclature has been adopted: F is the area; P is the pressure; ρ is the density; K is an experimental factor (introduced to allow for the effect of the speed of rotation of the shaft); l is the length of the groove; δ is the thickness of the liquid layer; U is the circumferential velocity of rotation of the shaft. If no rotation is present, Eq. (1) becomes the conventional formula of hydraulics for the determination of the rate of flow of a liquid through a groove or slit. The author directs special attention at the fact that Eq. (1) indicates a linear relationships between the square of the

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flow rate of the liquid and the pressure gradient even when rotation of the shaft does occur. From the same equation it is evident that the additional resistance produced by the rotation of the shaft depends on the geometry of the groove or slit. Another interesting peculiarity to which the author calls attention is the fact that, with a definite relation between the pressure gradient and the circumferential speed for a given groove or slit, the blocking of that slit is possible; that is, according to Eq. (1), when

$$2\frac{P_{in}-P_{out}}{l}=K\cdot\frac{l}{b}\cdot U^{2}$$

there will be no flow through the slit. Orig. art. has: 1 figure and 16 formulas.

ASSOCIATION: None

SUBMITTED: 16Dec63 ENCL: 00 SUB CODE: ME

NO REF SOV: 004 OTHER: 000

Card 3/3

BELOUSOV, A.I.

Determining axial fluid consumption during the rotation of a shaft. Izv. vys. ucheb. zav.; av. tekh. 7 no.3:106-109 '64.
(MIRA 17:9)

BELOUSOV, A.I., inzh.

Permissible current densities in the stator windings of asynchronous motors of sinking pumps. Izv.vys.ucheb.zav.; energ. 8 no.3:48-52 Mr '65. (MIRA 18:4)

1. Gosudarstvennyy proyektnyy institut "Soyuzvodokanalproyekt".

REKUS, G.G., kand.tekhn.nauk; BELOUSOV, A.I., inzh.

Selection of asynchronous motors for sinking pumps. Prom. energ. 20 no.3:31-34 Mr '65. (MIRA 18:6)

REKUS, G.G., kand. tekhn. nauk (Moskva); BELOUSOV, A.I., inzh. (Moskva)

Heating of the asynchronous motors of sinking pumps. Elektrichestvo no.3:62-66 Mr '65. (MIRA 18:6)

ACC NR: AP6033507 SOURCE CODE: UR/0413/66/000/018/0136/0137

INVENTOR: Belousov, A. I.

ORG: None

TITLE: A radial hydrostatic bearing. Class 47, No. 186227

SOURCE: Izobret prom obraz tov zn, no. 18, 1966, 136-137

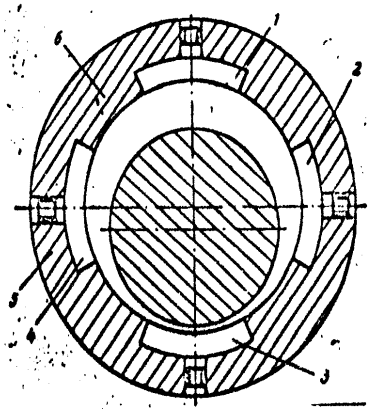
TOPIC TAGS: hydrostatic bearing, lift coefficient

ABSTRACT: This Author's Certificate introduces: 1. A radial hydrostatic bearing which contains a sleeve with chambers. These chambers are inclined with respect to the generatrix of the sleeve perimeter to equalize the lifting capacity of the bearing when the shaft moves in various directions. 2. A modification of this bearing in which the lift capacity is equalized under varying loads by selecting the inclination of the chambers with respect to the generatrix of the sleeve perimeter so that the midpoint of the chamber on one end of the bearing coincides with the midpoint of the bridge between adjacent chambers on the opposite end.

Card 1/2 UDC: 621.822.5:532.1

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204400025-6

ACC NR: AP6033507



1-4--chambers; 5--sleeve; 6--bridge

SUB CODE: 13/ SUBM DATE: 23Jun64

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ACC NR: AM6032372 Monograph UR/

Belousov, A. I. (Docent, Candidate of Technical Sciences); Bobrik, P. L (Docent, Candidate of Technical Sciences); Rakhman-Zade, A. Z. (Candidate of Technical Sciences); Silin, S. S. (Docent, Candidate of Technical Sciences); Uspenskiy, N. V. (Docent); Khvorostukhin, L. A. (Docent, Candidate of Technical Sciences); Sheryshev, V. I. (Candidate of Technical Sciences)

Thermal phenomena and machinability of aircraft materials (Teplovyye yavleniya i obrabatyvayemost' rezaniyem aviatsionnykh materialov) Moscow, Izd-vo "Mashinostroyeniye," 1966. 178 p. illus., biblio. (At head of title: Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya RSFSR) Errata slip inserted. 2400 copies printed.

Series note: Moscow. Aviatsionnyy tekhnologicheskiy institut. Trudy, vyp. 64

TOPIC TAGS: heat-resistant steel, heat-resistant alloy, heat generation, heat phenomena, gear threading, thread grinding, aircraft material, material machinability, metal machining

Card 1/3

UDC: 621.910.71:669.14.018.45

ACC NR: AM6032372

PURPOSE AND COVERAGE: This book is intended for engineering personnel of machine-building plants, scientific research institutes and plant laboratories. It may also be useful for students of schools of high technical education specializing in technology. The book reviews the most important problems of heat generation in the process of machining various aircraft materials and its effect on material machinability. New methods of machining procedure are discussed on the basis of analysis of physical and mechanical properties of materials. Theoretical analysis of heat-affected zones in machining is presented along with examples of its calculation. Also discussed are specific thermal phenomena and the process of machining light-weight and copper alloys at a speed up to 10,000 m/minute. Separate chapters are devoted to an analysis of thermal phenomena and machinability relative to gear threading at thread grinding. Chapters I and IV are written by Docent P. I. Bobrik, Cand. of Tech. Sciences; Ch. II. by Docent A. I. Belousov, Cand. of Tech. Sciences; Ch. III by Docent L. A. Khvorostukhin, Cand. of Tech. Sciences; Ch. V. by Docent S. S. Silin, Cand. of Tech. Sciences; Ch. VI. by Docent N. V. Uspensky; Ch. VII by V. I. Sheryshev, Cand. of Tech. Sciences; and Ch. VIII by A. Z. Rakhman-Zade, Cand. of Tech. Sciences.

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ACC NR: AM6032372

SUB CODE: 13/ SUBM DATE: 05Mar66/ ORIG REF: 065/ OTH REF: 007/

Card 3/3

BOL'SHAKOV, A.S.; MIZERETSKIY, N.N.; BELOUSOV, A.K.

[Preparation and regeneration of brines] Prigotovlenie i regeneratsiia rassolov. Moskva, TSentr. in-t nauchno-tekhn. informatsii pishchevoi promyshl., 1963. 81 p. (MIRA 17:9)

BELOUSOV, A.M., inzh.

Truck-mounted tubular tower for exterior house painting. Suggested by A.M.Belousov. Rats.i izobr.predl.v stroi. no.11: 36-38 '59. (MIRA 13:3)

1. Upravleniye otdelochnykh rabot No.7 stroitel'no-montazhnogo tresta No.25 Kuybyshevskogo sovnarkhoza.
(House painting--Equipment and supplies)

BELOUSOV, A.P.,; PREOBRAZHENSKIY, A.Yu., redaktor; KRASHENNIKOVA, V.F. tekhnicheskiy redaktor.

[Work of an automatic concrete plant] Rabota avtomatizirovannogo betonnogo savoda. Stalingrad, Oblastnoe knigoizdatel'stvo, 1952. 21 p. (MLRA 8:9)

(Concrete)

BELOUSOV, A.P.

SHMELEV, A.Ye., prof.; BELOUSOV, A.P., dotsent; KUDRYAVINA, T.A., kand. tekhn.nauk; FRUKTOV, V.V., inzh.; BOGATYREVA, A.V., inzh.

Introducing standard technological processes for machining parts in conditions of small-lot production. Trudy MIEI no.7:5-19 '57. (MIRA 10:12)

(Metal cutting) (Machine-shop practice)

BELOUSOV, A.F., dots., kand. tekhn. nauk; YEFIM'YEV, A.N., dots., retsenzent; KUSIKOV, S.N., dots., retsenzent; KORSAKOV, V.S., prof., doktor tekhn. nauk, red.

[Design of attachments] Proektirovanie prisposoblenii. Moskva, Mashinostroenie, 1964. 186 p. (MIRA 18:2)

BELOUSOV, A.P.

New data on the geology of the Kharamatolou trough in the Arctic Urals. Sov.geol. 6 no.2:130-135 F '63. (MIRA 16:4)

1. Tyumenskoye geologicheskoye upravleniye.
(Ural Mountains—Geology)

BELOUSOV, A. P.

PA 19T21

USSR/Pulse Communication
Noise - Measurements

Aug 1946

"The Maximum Real Sensitivity of Pulse Receivers," A. P. Belousov, Candidate of Physico-Mathematical Sciences, 9 pp

"Radiotekhnika" Vol I, No 5

Review of the so-called probability approximation of signal-to-noise ratio. The result is compared with deductions made by V. I. Siforov, published in "Radiotekhnika" Vol I, No 1.

19T21

BELOUSOV, A.P

AID P - 4557

Subject : USSR/Electronics

Card 1/2 Pub. 90 - 11/11

Author : Belousov, A. P.

Title : More precisision in conclusions in scientific literature.

Periodical : Radiotekhnika, 4, 75-79, Ap 1956

Abstract : The author enumerates in his list of references some books on radio engineering in which appear common errors based on an approximation. It concerns formulas of resonance $\omega_0 L_1 = R_1$ and the expression resulting from it of the minimum value of the coupling coefficient $K_{min} = \sqrt{\frac{2}{Q}}$. Both are used in calculations of transformers of the input circuit of television apparatus. Under certain circumstances, namely when $Q = 2$, K_{min} would be > 1 which is obviously impossible. In several examples, the author demonstrates the errors

AID P - 4557

Radiotekhnika, 4, 75-79, Ap 1956

Card 2/2 Pub. 90 - 11/11

resulting from the application of these approximate formulas and suggests caution in their use. Five diagrams, 5 Soviet references (1939-1954).

Institution : None

Submitted : O 27, 1955

BELOUSOV, A.P., kandidat fiziko-matematicheskikh nauk.

Separating a high-frequency signal and noise during detection.
Trudy MAI no.65:5-38 '56. (MLRA 9:12)
(Radio-Receivers and reception)

BELOUSOV, A.P., kandidat fiziko-matematicheskikh nauk.

Calculation of a full autotransformer input circuit based on ultrahigh frequencies. Trudy MAI no.65:72-86 '56. (MLRA 9:12)
(Radio circuits) (Electric transformers)

PHASE I BOOK EXPLOITATION SOV/3392

Belousov, Anatoliy Prokof'yevich

Raschet koeffitsiyenta shuma radiopriyemnikov (Calculating the Noise Factor of Radio Receivers) Moscow, Oborongiz, 1959. 135 p. Errata slip inserted. 10,050 copies printed.

Ed.: A. I. Ivanov-Tsyganov, Candidate of Technical Sciences; Ed. of Publishing House: M.S. Anikina; Tech. Ed.: V. I. Oreshkina; Managing Ed.: A.S. Zaymovskaya, Engineer.

PURPOSE: The book is intended for engineers engaged in the calculation and design of radio receivers and for teachers and students of advanced radio-engineering courses.

COVERAGE: The book discusses the theory of calculating the noise factor of radio receivers in the microwave range. The author develops formulas for calculating input circuits which ensure maximum sensitivity (minimum noise factor). The author presents examples of calculations of the more important problems and gives approximate values of some quantities used in these calculations. He

Card 1/5

presents three definitions of the noise factor, which, according to him, introduce a more methodical clarification. Some of his derivations are rigorous; this reportedly eliminates certain misunderstandings which may occur from textbooks which recommend the use of approximate relationships. The author thanks L.S. Gutkin and L. Yu. Blyumberg for their help. There are 20 references, 15 Soviet (4 are translations), 4 English and 1 German.

TABLE OF CONTENTS:

Calculating the Noise (Cont.) SOV/3392

Card 4/5

AVAILABLE: Library of Congress
Card 5/5

JP/lst
5-11-60

SIVERS, Arkadiy Petrovich; BELOUSOV, A.P., retsenzent; ZABOLOTSKIY, N.G., red.; SMUROV, B.V., tekhn.red.

[Radar receivers] Radiolokatsionnye priemniki. Izd.3., dop. i perer. Moskva, Izd-vo "Sovetskoe radio," 1959. 533 p. (MIRA 13:1)

(Radar)

BELOUSOV, Anatoliy Prokolf'yevich; TOKAR', V.M., red.izd-va; ORESHKINA, V.I., tekhn.red.

[Parametric amplifiers with diode condensers] Parametricheskie usiliteli s diodnym kondensatorom. Moskva, Gos.nauchno-tekh. izd-vo Oborongiz, 1961. 162 p. (Moscow. Aviatsionnyi institut. Trudy, no.141). (MIRA 15:3)

(Parametric amplifiers)

PEREVOSHCHIKOVA. K.A.; BELOUSOV, A.P.; SHISHKOV, V.P.

Accumulation of glutamine by tumors and its inclusion in the proteins of tumorous and normal cells. Vop. med. khim. 11 no.2:32-36 Mr-Ap '65. (MIRA 18:10)

1. Biokhimicheskaya laboratoriya Gosudarstvennogo onkologicheskogo instituta imeni P.A.Gertsena, Moskva.

PEREVOSHCHIKOVA, K.A.; BELOUSOV, A.P.; [illegible], T.

Action of liver ribonucleic acid on the growth of tumors in experimental animals. Biul. eksp. biol. i med. 60 no.8:102-105 Ag '65. (MIRA 18:9)

1. Biokhimicheskaya laboratoriya (zav. - doktor biolog. nauk A.P. Belousov) Onkologicheskogo instituta imeni Gertsena (dir. - doktor med. nauk prof. A.N. Novikov), Moskva.

BELOUSOV, A.P.

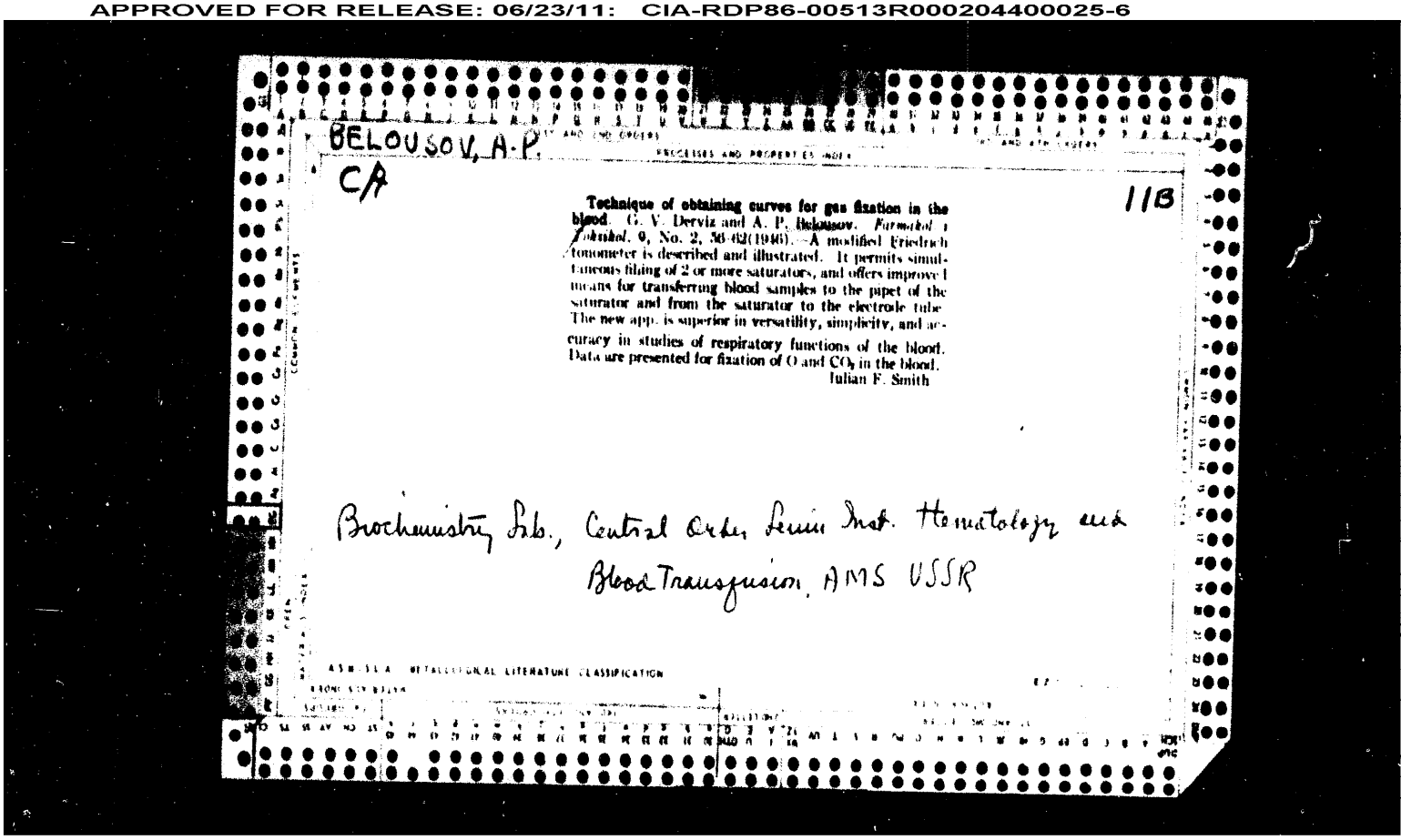
CA

2

Capillary activity of the substance in a membrane of a fat drop at the boundary water-fat, and the structure of the membrane. A. P. Belousov. *Trudy NIMI*, [illegible] [illegible], [illegible] Mosk. 1939, No. [illegible] [illegible]; *Khim. Referat. Zhur.* 1940, No. 6, 7.—Interfacial tension at the surface of fat particles in milk was detd. by the method of max. pressure of the bubble in drops by means of the Kantor-Rebinder app. Constituents of the fat particle and of milk plasma decrease considerably the interfacial tension between water and milk fat. The capillary activity and the adsorbability of the "membrane" substance exceed 1.5-2.0 times those of the plasma substance. The "membrane" substance is in all probability an interfacial emulsifying film of highly capillary-active substances (proteins, lecithin). The "membrane" consists of 3 layers of mols. and particles: an orienting layer of glyceride mols. (inner side of the "membrane"), lecithin micelles and protein micelles with strongly polar groups (outer side of the "membrane").

W. R. Henn

ASA-SLA METALLURGICAL LITERATURE CLASSIFICATION



BELOUSOV, A.P.

CA

11B

Technique of obtaining curves for gas fixation in the blood. G. V. Derviz and A. P. Belousov. *Farmakol. i Toksikol.* 9, No. 2, 58-62(1946).—A modified Friedrich tonometer is described and illustrated. It permits simultaneous filling of 2 or more saturators, and offers improved means for transferring blood samples to the pipet of the saturator and from the saturator to the electrode tube. The new app. is superior in versatility, simplicity, and accuracy in studies of respiratory functions of the blood. Data are presented for fixation of O and CO_2 in the blood.
Julian F. Smith

Biochemistry Lab., Central Order Lenin Inst. Hematology and Blood Transfusion, AMS USSR

ASTIA METALLURGICAL LITERATURE CLASSIFICATION

BELOUSOV, A. P.

USSR/Medicine - Blood Transfusion Feb 52

"Transfusion of Plasma and Blood Serum in Hemolytic Anemias," A. P. Belousov, L. L. Shepshelevich, Hematol Clinic, Cen Order of Lenin Inst of Hematol and Blood Transfusion

"Sov Med" Vol XVI, No 2, 15-18

Transfusion of plasma has a stabilizing effect on the blood pigment metabolism. This effect varies with the disturbances of pigment metabolism produced by different types of the disease. Administration of plasma or serum counteracts the effect of autohemolysins.

204T39

Belousov, A. P.

VLADOS, K.H.;OSECHENSKAYA, G.V.;BELOUSOV, A.P.

Role of chemotherapy in the treatment of hemolytic anemias. Ter. arkh., Moskva 24 no. 3:44-50 May-June 1952. (CIML 22:4)

1. Professor for Vlados. 2. Of the Central Order of Lenin Institute of Hematology and Blood Transfusion (Director -- Prof. A. A. Bagdasarov, Corresponding Member AMS USSR).

USSR/Human and Animal Physiology - Blood. Blood Diseases. P-3

Abs Jour : Ref Zhur - Biol., No 18, 1958, 84114

Author : Vlados, Kh.Kh., Nikolayeva, N.V., Belousov, A.P.
Inst : -
Title : The Problem of Treating Erythremia Patients with Radioactive Phosphorus.

Orig Pub : Sovrem. probl. gematol. i perelivaniya krovi, vyp. 31, 1955, 29-30.

Abstract : No abstract.

Card 1/1

BELOUSOV, A. P.

BELOUSOV, A. P.: "The exchange of nitrogen and blood pigments in the healthy organism and in certain diseases of the blood system." Acad Med Sci USSR. Moscow, 1956. (DISSERTATION FOR THE DEGREE OF DOCTOR IN BIOLOGICAL SCIENCE)

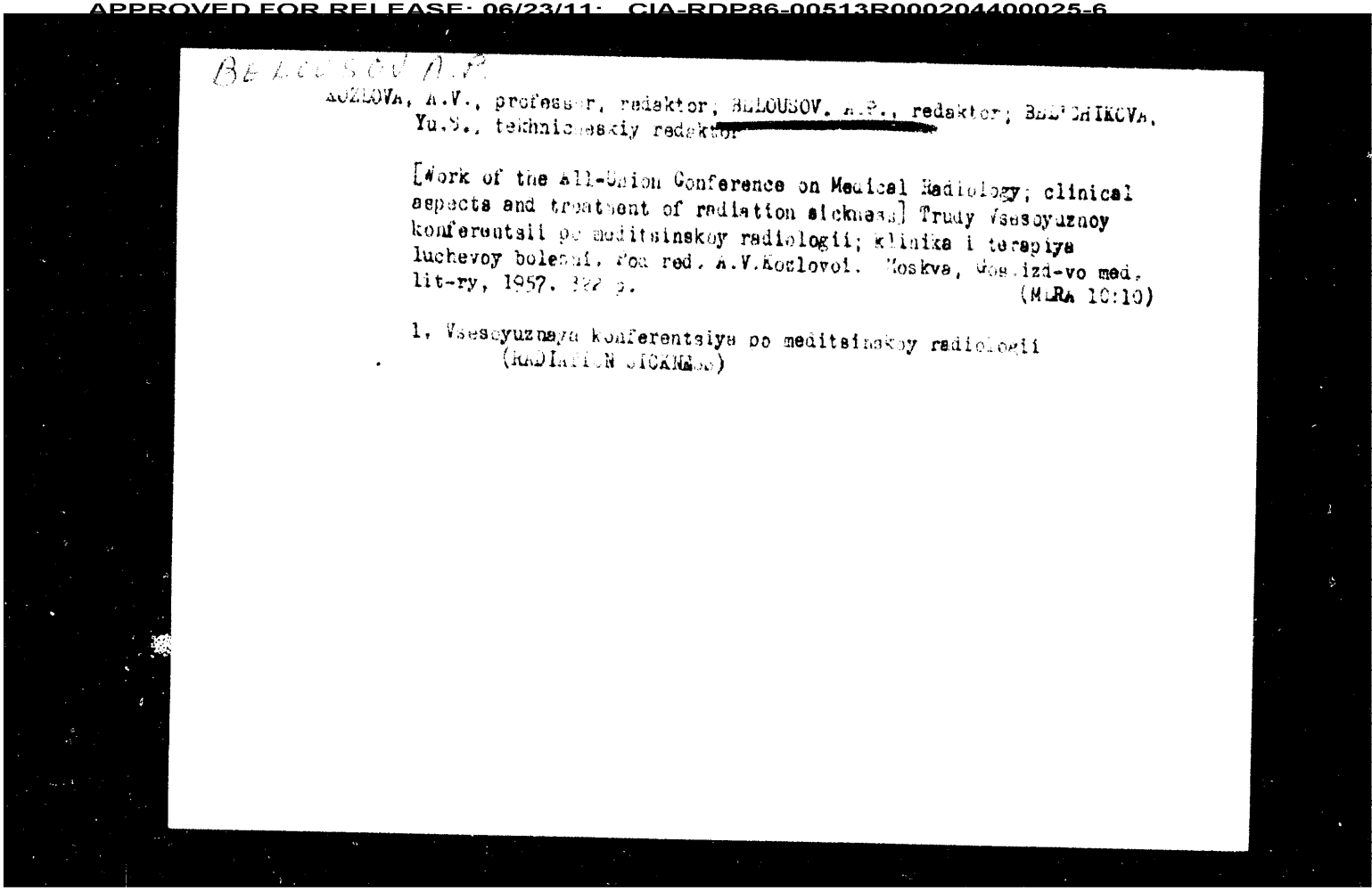
So.: Knizhnaya letopis' No 15, 1956, Moscow

BELOUSOV, A.P.

GORIZONTOV, P.D., professor, redaktor; BELOUSOV, A.P., redaktor; MOROZ, B.B., redaktor; LYUDKOVSKAYA, N.I., tekhnicheskiy redaktor; BEL'CHIKOVA, Yu.S., tekhnicheskiy redaktor

[Transactions of the All-Union Conference on Medical Radiology; experimental medical radiology] Trudy Vsesoiuznoi konferentsii po meditsinskoi radiologii; eksperimental'naia meditsinskaia radiologiia. Pod red. P.D.Gorizontova. Moskva, Gos. izd-vo med.lit-ry, 1957. 294 p. (MLRA 10:7)

1. Vsesoyuznaya konferentsiya po meditsinskoy radiologii. 2. Chlen-korrespondent AMN SSSR (for Gorizontov)
(RADIOLOGY, MEDICAL)



BELOUSOV A.P.

KOZLOVA, A.V., professor, redaktor, BELOUSOV, A.P., redaktor; BELOSHAIKOVA, Yu.S., tekhnicheskiy redaktor

[Work of the All-Union Conference on Medical Radiology; clinical aspects and treatment of radiation sickness] Trudy Vsesoyuznoy konferentsii po meditsinskoy radiologii; klinika i terapiya luchevoy bolezni. Pod red. A.V.Kozlovoi. Moskva, Gos.izd-vo med. lit-ry, 1957. 322 p. (MLRA 10:10)

1. Vsesoyuznaya konferentsiya po meditsinskoy radiologii (RADIATION SICKNESS)

BELOUSOV, A.P.

USSR / Human and Animal Physiology. The Effect of Physical Factors. Ionizing Irradiations. T

Abs Jour: Ref Zhur-Biol., No 22, 1958, 102368.

Author : Belousov, A. P.; Shitikova, M. G.; Shepshelevich, L.L.
Inst : Not given.
Title : Synthesis and Disintegration of Blood Hemoglobin in Acute Radiation Syndrome.

Orig Pub: Tr. Vses. konferentsii po med. radiol. Eksperim. med. radiol. M., Medgiz, 1957, 123-127.

Abstract: The process of Hb disintegration was investigated in dogs with chole-ureteral anastomosis and fistula of the gall bladder at various times after general irradiation of 200-400 r. As an index, the level of bilirubin excretion and the content of Fe in the serum were taken with simultaneous calculation of the Hb amount and amount of erythrocytes in the

Card 1/3

ILLEGIBLE

Country :USSR
Category :Human and Animal Physiology, Physical Factors T

Abs. Jour. :Ref Zhur Biol, No. 2, 1959, No. 8586

Author :Belousov A.P.
Institut. :--
Title :The Effect of Ionizing Radiation on the Hemolysis of Erythrocytes.

Orig. Pub. :Vest. rentgenol. i radiol., 1957, No. 3, 5--14

Abstract : A study was made of the resistance to hemolysis by increasing concentrations of saponin (from 0.5 to 17 mg%) of washed erythrocytes, suspended in physiological solution, of rabbits subjected to total X-irradiation (700--1300 r). After twenty minutes of hemolysis, the solution was centrifuged and colorimetric determinations were made of the coefficient of light absoption, which served as an index of the extent of hemolysis. Irradiation with 700 r led to the formation of erythrocytes of increased resistance (cells of low reisitance rapidly disappeared from

Card: 1/3

Country :USSR
Category :Human and Animal Physiology, Physical Factors

Abs. Jour. :Ref Zhur Biol, No. 2, 1959, No. 8586

Author :
Title :

Orig Pub. :

Abstract :the circulation after irradiation). An intensive disintegration of erythrocytes, which lasted for 30 days, followed irradiation with 1000--1300 r. The appearance of resistant erythrocytes in the blood was preceded by a period of active hempoiesis and restoration of the Hb level. Irradiation with 700 r in combination with a burn of 15--25% of the body surface was followed by an increase in hemolysis, which attained a maximum between day 5 and 7 (the period of acute toxicosis), while a rise in erythrocyte resistance was noted at day 25--30.

Card: 2/3

direct effect of the radiation upon the cells and a secondary effect of hemolysins formed

Card: --E.B.Glikson

BELOUSOV, A.P.

"Clinical Picture and Treatment of Penetrating Wounds of the Cornea During Radiation Sickness of Dogs," by P. V. Preobrazhenskiy, A. P. Belousov, N. S. Dzhavadyan, V. N. Lizogubov, L. F. Orkodashvili, and A. N. Pokrovskiy, Chair of Ophthalmology (head, Prof B. L. Polyak), Military-Medical Order of Lenin Academy imeni S. M. Kirov, Vestnik Oftalmologii, No 3, May/Jun 57, pp 10-13

The purpose of the present research was to study the clinical picture and treatment of penetrating wounds of the cornea of dogs sick with acute radiation sickness under conditions of delayed surgical treatment.

Three series of experiments were performed on 45 dogs: (1) the healing of penetrating wounds of dogs (controls); (2) the healing of penetrating wounds of dogs irradiated by 300 r from radioactive cobalt, but not treated; and (3) the healing of penetrating wounds of dogs irradiated by 300 r from radioactive cobalt and treated with penicillin. The method of surgical intervention for the application of a corneal suture as suggested by the Central Institute of Blood Transfusion was also investigated.

Results proved that (1) there were no clinically visible differences between the control and irradiated dogs during the latent period of acute radiation sickness in respect to the healing of the penetrating wounds of dogs' cornea; and (2) corneal sutures applied on the third day after the infliction of wounds on irradiated dogs were found to be an effective method for the surical treatment of this type of combined injury. (U)

Belousov, A.P.

BELOUSOV, A.P.

Effect of ionizing radiation on hemolysis of erythrocytes [with summary in English]. Vest.rent. i rad. 32 no.3:5-14 My-Je '57. (MIRA 10:10)

1. Iz radiologicheskogo otdela (zav. - prof. A.V.Kozlova) Gosudarstvennogo nauchno-issledovatel'skogo instituta rentgenologii i radiologii imeni V.M.Molotova (dir. - dotsent I.G.Lagunova).

(HEMOLYSIS
by saponin in rabbits, eff. of x-rays)
(SAPONINS, eff.
hemolysis in ra bbits, eff. of x-rays)
(ROENTGEN RAYS, eff.
on hemolysis in rabbits induced by saponin)

KOZLOVA, A.V., prof., otv.red.; TROITSKIY, V.L., red.; KURLYANDSKAYA, E.B., red.; BELOUSOV, A.P., red.; IVANITSKIY, A.F., red.; GRODZENSKIY, D.E., red.izd-va; ASTAF'YEVA, G.A., tekhn.red.

[Medical radiology] Meditsinskaia radiologiia. Moskva, Izd-vo Akad.nauk SSSR, 1960. 400 p. (MIRA 13:4)

1. Vsesoyuznaya nauchno-tekhnicheskaya konferentsiya po primeneniyu radioaktivnykh i stabil'nykh izotopov i izlucheniy v narodnom khozyaystve i nauke, Moscow, 1957. 2. Ministerstvo zdravookhraneniya SSSR i Institut rentgenologii i radiologii RSFSR, Moskva (for Kozlova). 3. Institut gigiyeny truda i profzabolevaniy Akademii meditsinskikh nauk SSSR (for Kurlyandskaya).

(BIOLOGY, MEDICAL)

BELOUSOV, A.P.; KOZYREVA, A.L.

Fate in the body of sodium chromate administered in pure form and in the form of labelled erythrocytes. Med.rad. 5 no.10:38-42 '60.
(MIRA 14:2)

(SODIUM CHROMATES) (ERYTHROCYTES)

BELOV, A.P.; KOZYREVA, A.L.

Resistance of erythrocytes to saponin during treatment of erythremia with radioactive phosphorus. Probl.gemat.i perel. krovi no.7:17-21 '61. (MIRA 14:9)

1. Iz kafedry meditsinskoy radiologii (zav. - prof. V.K. Modestov) i kafedry laboratorii diagnostiki (zav. - prof. Ye.A. Kost) TSentral'nogo instituta usovershenstvovaniya vrachey (dir. M.D. Kovrigina).
(ERYTHREMIA) (PHOSPHORUS--ISOTOPES) (ERYTHROCYTES)
(SAPONINS--PHYSIOLOGICAL EFFECT)

MANT'YEV, V.A.; BELOUSOV, A.P.

Globulin fractions of proteins in cell nuclei of normal tissues and malignant tumors. Vop. med. khim. 8 no.5:514-518 S-O'62
(MIRA 17:4)

1. Biokhimicheskaya laboratoriya Gosudarstvennogo onkologicheskogo instituta imeni P.A. Gertsena, Moskva.

MIR'YEM, L.M.; BELOUSOV, A.P.

Activity of lactic dehydrogenase of the blood and liver catalase in mice in induced carcinogenesis. Vop.med.khim. 10 no.3:296-299 My-Je '64. (MIRA 18:2)

1. Biokhimicheskaya laboratoriya Gosudarstvennogo onkologicheskogo instituta imeni Gertsena, Moskva.

VLADZIYEVSKIY, A.P., doktor tekhn. nauk, prof.; BELOUSOV, A.P., kand. tekhn. nauk, dots.; GLADILIN, A.N., kand. tekhn. nauk, dots., retsenzent; TSYPKIN, M.Ye., inzh., retsenzent; BEYZEL'MAN, R.D., inzh., red.[deceased]; FRID, L.I., inzh., red.izd-va; MODEL', B.I., tekhn. red.

[Arrangement of automatic production lines] Ustroistvo avtomaticheskikh linii. Moskva, Mashgiz, 1963. 242 p.
(MIRA 17:1)

L 33367-66

ACC NR: AP6014004 SOURCE CODE: UR/0219/65/060/008/0102/0105

AUTHOR: Perevoshchikova, K. A.; Belousov, A. P. (Doctor of biological sciences); Bul'dyayeva, T. V.--Buldyaeva, T. V.

ORG: Biochemistry Laboratory/headed by A. P. Belousov, Doctor of biological sciences/, Institute of Oncology im. P. A. Gertsen/directed by Prof. A. N. Novikov, Doctor of medical sciences/, Moscow (Biokhimicheskaya laboratoriya Onkologicheskogo instituta)

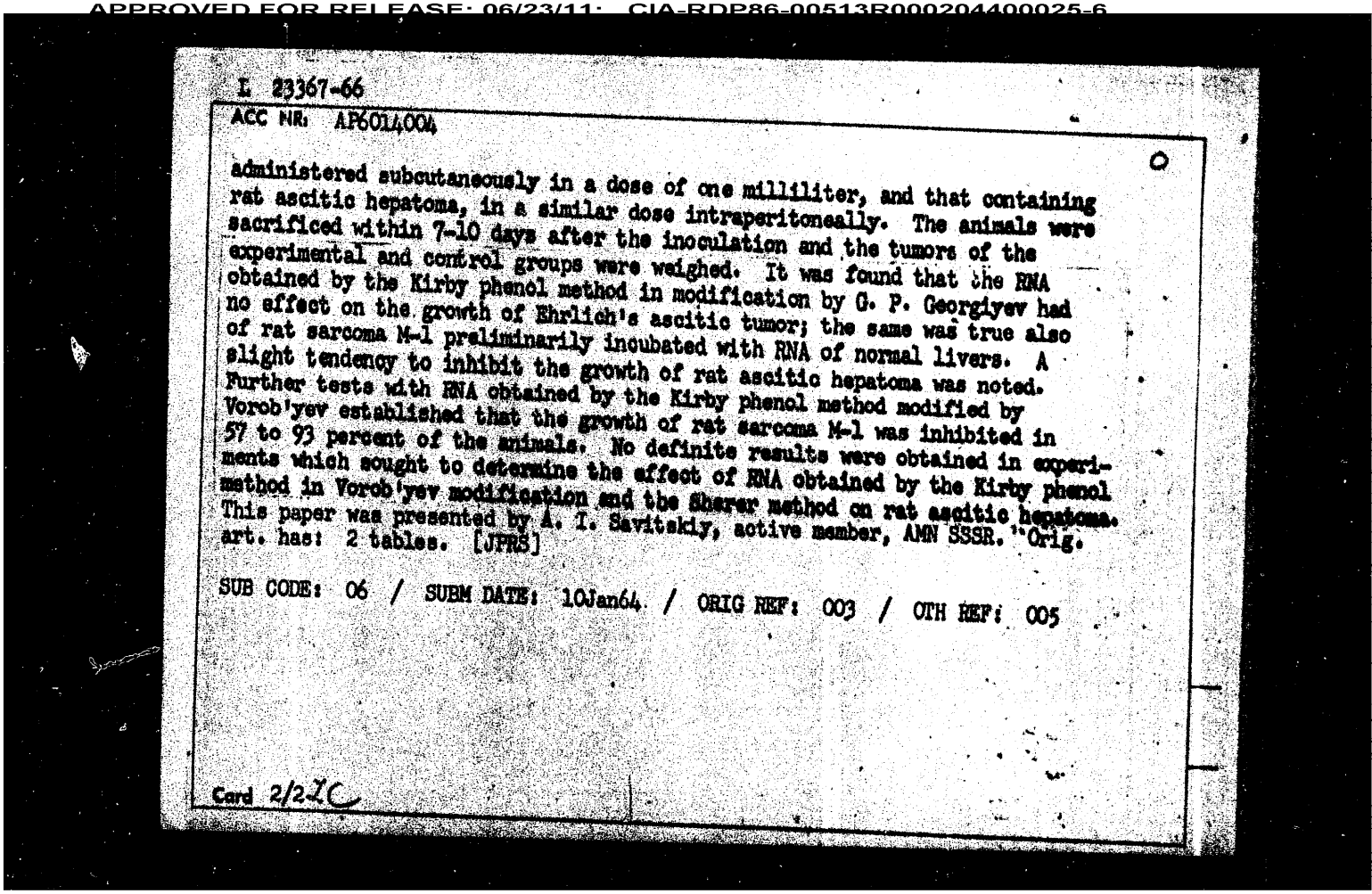
TITLE: Effect of hepatic ribonucleic acid on tumor growth in experimental animals

SOURCE: Byulleten' eksperimental'noy biologii i meditsiny, v. 60, no. 8, 1965, 102-105

TOPIC TAGS: tumor, RNA, liver, rat, mouse

ABSTRACT: Ribonucleic acid was obtained from the livers of rats and mice by means of the modified Kirby phenol and Sherer methods. The acid was placed in physiological solution (3-4 milligrams in one milliliter) and mixed in a ratio of 5:1 with a suspension of M-1 sarcoma cells, Ehrlich's mouse ascitic tumor washed in the above solution, or rat ascitic hepatoma. An equal quantity of physiological solution was added in the case of controls. The mixture with the ribonucleic acid (RNA) (final concentration of the RNA equalled 2.5-3 milligrams in one milliliter) was incubated at room temperature for a period of 2 hours, or at a temperature of 4°C for a period of 18 hours. After incubation the suspension containing sarcoma M-1 was

Card 1/2 UDC: 616-006-085.739.6-092.9



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ACC NR: AP6014004

administered subcutaneously in a dose of one milliliter, and that containing rat ascitic hepatoma, in a similar dose intraperitoneally. The animals were sacrificed within 7-10 days after the inoculation and the tumors of the experimental and control groups were weighed. It was found that the RNA obtained by the Kirby phenol method in modification by G. P. Georgiyev had no effect on the growth of Ehrlich's ascitic tumor; the same was true also of rat sarcoma M-1 preliminarily incubated with RNA of normal livers. A slight tendency to inhibit the growth of rat ascitic hepatoma was noted. Further tests with RNA obtained by the Kirby phenol method modified by Vorob'yev established that the growth of rat sarcoma M-1 was inhibited in 57 to 93 percent of the animals. No definite results were obtained in experiments which sought to determine the effect of RNA obtained by the Kirby phenol method in Vorob'yev modification and the Sherer method on rat ascitic hepatoma. This paper was presented by A. I. Savitskiy, active member, AMN SSSR. Orig. art. has: 2 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: 10Jan64 / ORIG REF: 003 / OTH REF: 005

Card 2/2 IC

CA BELOUSOV, A.

12

Physical-chemical theory of the separation of butter in churning. A. Belousov. *Molochnaya Prom.* 9, No. 1, 21-8(1948); *Chem. Zent.* 1948, II, 540-1. The older theories of Archerwon and Soxhlet are discussed. The foam theory of Rahn is held to be untenable. Cream can contain 80% fat and still not churn. Foam formation is a min. in milk contg. 0.5-3.0% fat. The principal constituents of the surface film are lecithin, protein, and some glycerides of the milk fat. The lecithin side of the lipoprotein lies toward the fat side; the hydrophilic portion of the protein mol. lies toward the plasma side. The drawing of the fat globules into the air bubbles can be observed under the microscope. This is the principal process involved in the churning, since the fat globules agglomerate in the air bubbles. Tests made with cream contg. 27% fat between 5 and 70° showed that the foam contained the most fat at 10-15°. The flotation coeff. (measuring the rise of fat globules into the air bubbles as amt. of fat per l. of air) was much higher for solid than for liquid fat. The air dispersion reached 90% of the cream vol. The av. diam. of the air bubbles was 120-60μ but decreased later to 60-80μ. The no. of air bubbles per l. of cream is also important; this no. was 60 × 10⁶ with a surface of 80 cu.m. In these processes the phys.-chem. destabilization of the fat dispersion is differentiated from the hydrodynamic destruction of the air bubbles.

M. G. Moore

1957

BELOUSOV, A.

23391. Novyy sposob uluchsheniya syra. Moloch. prom-st', 1949, No. 7, c. 20-23.

SO: LETOPIS NO. 31, 1949.

CA BELOUSOV, A.

12

Distribution of moisture in cheese. A. Belousov. *Molochnaya Prom.* 11, No. 1, 23-4(1950). In cheese blocks the highest moisture level is found in the layer 8-20 mm. from the surface, where it averages 1% above the outer and central sections; similarly the highest av. acidity is found in the same location (pH lower by about 0.03-0.5 unit). G. M. Kosolapoff

BELOUSOV, A.
CA

12

Acidity and quality of cheese. A. Belousov. *Molochnaya Prom.* 11, No. 6, 9-14(1950).—A definite relation exists between cheese quality and the true acidity of the initial mass from which it is derived. High acidity at any stage leads to poor quality, especially in consistency. Other factors (such as bacterial activity) in later stages of production may cover up to some extent the deleterious effects of acidity. Hence optimum conditions for a particular raw material cannot be drawn up as yet.
G. M. Kosolapoff

BELOUSOV, A.

CA

12

Optimum limits of active acidity of cheese after pressing. A. Belousov. *Molochnaya Prom.* 11, No. 7, 7-12 (1950).—The optimum pH lying between 5.3 and 5.9 assures a cheese of extra quality, both from taste and consistency viewpoints. The evaluation of cheese is discussed.

G. M. Kosolapoff

BELOUSOV, A.

USSR (600)

Dairy Products - Analysis and Examination

Scientific research work in the cheese industry. Mol prom 13 no 5, 1952

9. Monthly List of Russian Accessions, Library of Congress, August 1952, Uncl.

2

BELOUSOV, A.

Chem Abs v 45
1-25-51
Journ

(3)

The role of surface phenomena in the butter-formation process. A. Belousov. *Molochnaya Prom.* 14, No. 9, 28-34(1953).—Rahn's foam theory, its Zaikovskii version and the flotation theory, proposed for the formation of butter from cream during churning, are discussed together with some of the contributing factors, namely, the phys.-chem. properties of the fat-globule-stabilizing membrane (I), the breakdown of I, the air dispersion, and the influence of the surface-active agents. It was pointed out that the expt. evidence disproves the presence of Rahn's special foam agent in the milk, and is largely supporting the flotation theory. According to this, during churning, the fat globules (II) are drawn into the air-liquid interface, and thus conc. on the surface of the air bubbles (III). Likewise, not all of the surface-active agents aid the churning process. They might interfere with the adherence of particles to the air bubbles (albumin, lecithin, and saponin prolong, and isoamyl alc. hastens, the churning process). Consequently, the adherence of II to the surface of III necessitates at least a partial breakdown of a membrane encasing the II upon its collision with III. A change in the phys. state of I from hydrophylic to hydrophobic upon the addn. of isoamyl alc. to cream facilitates flotation of II by III during churning and thus hastens the process. Vladimir N. Krukovsky

BELOUSOV, A., kandidat khimicheskikh nauk.

Causes of "splitting" in Dutch cheese. Moloch.prom. 18 no.3:9-12 '57. (MLRA 10:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut maslodel'noy i syrodel'noy promyshlennosti.
(Cheese)

BELOUSOV, A. P.

USSR/Chemical Technology. Chemical Products and Their Application -- Food industry, I-28

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6649

Author: Belousov, A. P.

Institution: All-Union Scientific Research Institute of Cheese Industry

Title: Curdling of Milk by Rennet Enzyme as an Index of Its Suitability for the Making of Cheese

Original Publication: Tr. Vses. n.-i. in-ta syrodel'n. prom-sti, 1955, No 2, 14-26

Abstract: Deterioration of the curdling of milk by rennet enzyme is associated with inhibition of lactic acid process, slowing down of whey separation prolonging of technological process of cheese making and increase of fat removal with the whey. On processing of raw, rennet-resistant milk, a cheese is obtained which defective in taste, consistency and texture. An addition to the unpasteurized milk of a bacterial starter eliminates, to a considerable extent, the detrimental effect of the rennet resistance of milk. Pasteurization of rennet-resistant milk

Card 1/2

USSR/Chemical Technology. Chemical Products and Their Application -- Food industry, I-28

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6649

Abstract: followed by addition of $CaCl_2$ and bacterial starter precludes lowering of the quality of cheese, but does not reduce the duration of the technological process. Curdling of milk by the rennet enzyme should be utilized as one of the indices of its suitability for cheese manufacture.

Card 2/2